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UniSourceEnergy SERVICES

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AZ CORP COMMISSION
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April 1, 2013

Docket Control
Arizona Corporation Commission
1200 West Washington
Phoenix, Arizona 85007

Re: Notice of Filing – UNS Electric, Inc.'s Resource Planning and Procurement Work Plan, Docket No. E-00000V-13-0070

Pursuant to Arizona Administrative Code R14-2-703.G, UNS Electric, Inc. ("UNS Electric") is required to file a work plan that includes, 1) an outline of the contents of the resource plan the load-serving entity is developing to be filed the following year as required under subsection (F); 2) the methods for assessing potential resources; 3) the sources of the load-serving entity's current assumptions; and 4) an outline of the timing and extent of public participation and advisory group meetings the load-serving entity intends to hold before completing and filing the resource plan. UNS Electric hereby files its 2013 work plan for its Resource Plan.

If you have any questions regarding this filing, please contact me at (520) 884-3680.

Sincerely,

Jessica Bryne

Jessica Bryne
Regulatory Services

cc: Barbara Keene, ACC
Compliance, ACC

Arizona Corporation Commission
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2014 Integrated Resource Plan – TEP and UNSE Work Plan

R14-2-703 G. 1.

2014 TEP and UNSE Integrated Resource Plan Outline

Tucson Electric Power Company ("TEP") and UNS Electric, Inc. ("UNSE") will issue Integrated Resource Plans ("IRP") in 2014. Below is a preliminary outline of the topics to be covered in the 2014 Integrated Resource Plan final reports.

Executive Summary

Recommended Resource Plan
Recommended Resource Plan Timeline
Short-Term Action Plan

Load Forecast

Load Growth and Customer Base Assumptions
Retail Energy Forecast
Retail Demand Forecast

Load and Resource Adequacy

Resource Adequacy in the Desert Southwest Region
TEP's and UNSE's Existing Resource Capacity
Future Capacity Requirements

Demand Side Resources

Energy Efficiency Programs
Direct Load Control Programs

Supply Side Resources

Conventional Resources
Renewable Resources
Distributed Generation Resources
Renewable Resource Integration Costs
Energy Storage Technologies

Outline Continued

Transmission Resources

TEP's and UNSE's Existing Transmission Resources
TEP's and UNSE's Load Serving Capability
Future Transmission Options

Long-Term Forecast Assumptions

Natural Gas Price Forecast
Wholesale Market Price Forecast
Emission Prices
Financial and Capital Assumptions
Sensitivity Forecasts
Scenario Forecasts

Fuel Supply Studies

Natural Gas Supply

Integrated Resource Planning Results

Energy Efficiency Standard Compliance
Arizona Renewable Energy Standard Compliance
Recommended Resource Strategy
Net Present Value Revenue Requirements
CO2 Emissions
NOx Emissions
SO2 Emissions
PM Emissions
Hg Emissions
Natural Gas Exposure
Water Consumption
Capital Investments
Customer Rate Impacts
Customer Bill Impacts
Resource Planning Conclusions
Contingency Planning
Proforma Summaries

R14-2-703 G. 2.

IRP Process Overview

The methodology used for assessing potential resource portfolios can be described as a two stage evaluation process.

Stage 1 - Screening Analysis

Once all the input assumptions, minimum planning requirements and evaluation criteria are defined, a computer simulation model is used to perform the screening analysis in Stage 1. This model is Power Simm Planner developed by Ascend Analytics, Inc. Power Simm Planner is a resource planning model designed to optimize a utilities' resource portfolio based on a given set of assumptions. In the Stage 1 screening analysis, Power Simm Planner simulates potential resource portfolios based on the operating characteristics of each resource and its total cost. The screening analysis provides an opportunity for testing the limits of all modeling assumptions and for gaining insights into how a given portfolio operates under a variety of forecast scenarios.

Stage 2 - Detailed Portfolio Simulation

Once the screening process is complete, the optimized portfolios from Stage 1 undergo further detailed analysis. In this Step Energy 2, Power Simm Dispatch, an hourly chronological production cost model is utilized to develop a full set of financial Proformas. These Proformas provide the basis for developing the recommended resource plan. Finally, Stage 2 includes a few contingency options associated with the recommended plan to deal with unforeseen changes in load growth and environmental compliance. Once the process is complete a list of portfolios are evaluated on the following criteria:

Cost: As measured by the net present value of total system revenue requirements. The revenue requirements for a given resource plan include resource capital, O&M, fuel, purchase power and environmental compliance costs.

Environmental Impacts: As measured by the output of air emissions and water consumption. For each portfolio analyzed, the resource planning process captures the quantities and costs associated with emissions output and water consumption.

Portfolio and Risk Diversity: As measured by the diversification of all fuel sources and total system emissions output.

R14-2-703 G. 3.

Data Assumptions

The Resource Planning group is responsible for overseeing the coordination of the resource planning efforts. This group is comprised of representatives from different planning areas that provide the input assumptions required to perform the IRP analysis. Planning groups such as Financial Planning, Supply-Side Planning, Transmission Planning, Energy Efficiency and Renewable Energy Programs provide the financial and technical assumptions around the various resource alternatives.

External Data Sources

In addition to internal groups providing data inputs, numerous external data sources are also used in the development of IRP modeling assumptions. The use of an independent third-party helps resource planners avoid internal company biases and provides the IRP process with a comprehensive set of in-depth forward thinking assumptions. Some of these third party data sources may include:

- U.S. Department of Energy ("DOE")
- Black & Veatch
- National Renewable Energy Laboratory ("NREL")
- Navigant
- ICF International
- National Energy Technology Laboratory ("NETL")
- Other Utilities and Public Stakeholders

Long Range Forecast Assumptions

Finally, the Resource Planning group relies on a variety of energy consultant services from companies such as IHS CERA, Wood Mackenzie, PACE Global and others to develop its long-term forecast assumptions. These service companies provide a comprehensive set of long-term market forecasts that are correlated around the future supply and demand of energy, fuel supply, resource technology innovations and potential environmental compliance costs. These forecasts provide the basis for the IRP reference case assumptions.

R14-2-703 G. 4.

IRP Public Workshops

In developing the 2014 Integrated Resource Plan, TEP and UNSE plan to conduct a number of public workshops during the fall of 2013 to inform and solicit feedback from a variety of stakeholders. The goal of the workshops is to provide a public forum where participants can ask questions and provide input into the resource planning process.